THE
TRAINING SCHOOL BULLETIN

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All things have virtue fashioned as they are.
Although the sun is beautiful at noon,
I could not wish such brilliance for the moon,
Or find it in my heart to scorn a star.

The beacon's beam that pierces through the night
I would not wish my lamp to emulate.
I love the lantern glowing at my gate,
And find contentment in my candle light.

—Heather Collier Huntington

The Effect of Prizes in Increasing the Word Learning of Subnormal Children

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Experimental studies in the training of low-grade feeble-minded children have usually suggested unexpected and unsuspected learning ability. Such studies as have been made deal with more or less simple reactions, similar to the type of experiments used in studying animal learning. Reading, of course, is considered as too complex and abstract a process to attempt with children of a mental age below six years.

At the Vineland (New Jersey) Training School for the Education of the Feeble-minded, Aldrich and Doll, in working experimentally with idiot children, found that the use of incentives, such as food, lures and toys, provided stimulation which indicates greater ability under given situations than under usual conditions. These experiments with problem solving and conditioning responses of idiots suggested the use of concrete incentives in increasing the learnings of children with limited ability. In the education of these subnormal (not idiot) children, teaching them to read is a problem of prime importance and of great difficulty. Any technique which would aid in solving this problem seems worthy of investigation.

Specialists in reading instruction generally agree that it is practically useless to attempt to teach a child to read before he has reached a six year mental level. If this applied to all cases, it would mean that reading instruction in the class for subnormal children would not begin until the child is between nine and twelve years of age. On the other hand, among the experiments mentioned above were some which suggested that mental age in itself may not be a criterion of specific learning abilities. Thus, in a comparative study made on the basis of genetic age scales, with idiot children ranging in mental age from 19 months to 38 months compared with normal children ranging in life age from 19 to 38 months, the idiot showed a wider range of development and more unevenness than did the

normal children. The conclusion reached was: "Adding physical development to these differences (i.e. mental differences), we separate the two groups more extensively, and in a way that favors the idiot group from a training point of view." There is then, apparently some justification in attempting to teach subnormal children to read even before they have reached a mental age of six, and in investigating techniques which would make this teaching more effective.

The purpose of this study was to determine the effects of incentives (prizes) in the learning of words, i.e. the recognition of words, under usual classroom conditions, in a class of subnormal children. A description of the children in terms of age, mental age, I.Q., and reading readiness is given in Table I. The entire class of 16 children took part in the experiment. The chronological age range was from 6 years, to 13 years; the mental age range from 3 to 7 years, and the I.Q. range from 33 to 70. The reading grades in terms of standardized test results at the beginning of the experiment was below first grade level for each child. Reading readiness was determined by the administration of the Monroe Diagnostic Tests for Reading Disabilities.

The procedure used was as follows: A list of words made up from reading charts based on classroom activities was the material of the experiment. Children were tested weekly, over a period of thirteen weeks. After an initial period of three weeks, incentives were offered on alternate weeks to those who increased the number of words recognized at the end of these weeks. During each daily drill period of this week, the offer of incentives was emphasized. The incentives offered were a toy, candy, and money. The incentive was the variable factor in the experiment.

The nature of the situation was such, that it did not seem feasible to have two groups, one for control, and one as the experimental, although this would be more satisfactory. The controls, therefore, were inherent in the experiment itself. These were in the matter of time and the uniformity of procedure, with the exception of the offer of the prize at stated periods.

The constants in the procedure were the following: The words derived from the stories of classroom activities as told

TABLE I

THE C.A., M.A., I.Q., READING GRADES AND PRELIMINARY DATA CONCERNING PUPILS IN EXPERIMENT

Names	C.A.	M.A.	I.Q.	Rdg. Grade Gates	Rdg. Readiness Monroe	No. of words recognized Week I	No. recognized Week 13	Total Gains	No. Retained September Following
Nick	11—6	7—0	61	K	K+	28	100	72	91
Dan	12—2	6—2	50	K	+	30	96	66	77
Salvatore	9—9	6—4	65	K	+	11	96	85	74
John	11—8	7—2	61	K	+	28	100	72	?
Tessie	8—5	6—4	75	K	+	7	58	51	46
Billy	12—6	5—6	44	K	+	10	70	60	63
Rocco	12—6	5—6	44	K	—	5	50	55	41
Tony A.	8—8	6—6	75	K	—	12	38	26	31
Elvira	9—9	5—10	60	K	+	6	39	33	38
John D.	11—2	6—10	61	K	+	6	29	23	19
Fred	9—2	6—3	68	K	—	6	35	29	?
Arnold	11—2	5—9	51	K	—	1	21	20	?
Cephas	9—11	4—4	49	K	—	0	7	7	4
Sergio	10—5	5—2	50	K	—	0	4	4	4
Henry	13—1	6—8	51	K	—	0	21	21	19
Nancy	12—3	4—0	33	K	—	0	2	2	0

K = Kindergarten or no grade

\+ = Evidence of reading readiness

— = No evidence of reading readiness

by the children, were printed on wall charts. A list of words in the order in which they appeared in the stories was also arranged on a wall chart. Flash cards of the words were used, too. Words were not duplicated on either the lists or flash cards. The number of times a word appeared on the charts, however, might have some effect on its being learned. This is a good subject for further investigation and a beginning has been made.

On each of the first four days of the week, the whole story was read by individuals in the class, each child taking part. The teacher pointed to each word as it was read. Help was given when needed. This was followed by drill on the word list arranged in order of appearance in the context. Children were encouraged to find the word through the context if they did not recognize it at sight. On alternate days, flash cards were used in the same way as the word list. Thirty minutes per day were spent on this activity. The fifth day, Friday, was spent on the weekly test, which consisted of the vocabulary listed in alphabetical order.

The first three weeks were spent in following the method outlined above, with weekly testing on the alphabetical list. This was to discount the possibility of the effects of previous learnings in influencing results. The fourth week, the children were told that those who learned new words on the list would be given a prize. The toys which were to be used were exhibited, and it was pointed out that each one had an opportunity to earn one. The child learning the greatest number of additional words would be given first choice in selecting the toy. Thereafter prizes were offered on alternative weeks. The weekly testing continued. Incentives were offered on five alternate weeks, toys the fifth and eleventh week, money (pennies) the seventh week, and candy, the ninth and thirteenth weeks. When pennies and candy were offered, a penny or a piece of candy was awarded for each new word learned.

The results of the experiments in terms of number of words learned at each weekly period are shown in Table II. Without doubt, the indications are that the direct use of prizes increases both the effort and to a large extent the accomplishment in learning tasks. While in many cases results were numerically negative, there was noticeable throughout the period of the

TABLE II

Weekly and Average Gains in Number of Words Learned

Week	I 2	I 3	I 4	II 5	I 6	II 7	I 8	II 9	I 10	II 11	I 12	II 13	I Gain for non-incen.	II Gain for incen. period	I Ave. Gain	II Ave. Gain	I D	II D	I D^2	II D^2
Nick	12	15	14	6	3	17	1	4	2	2	0	0	43	29	6.1	5.8	4.2	0.8	17.6	0.6
Dan	2	13	7	7	0	10	3	8	2	3	12	3	35	25	5.0	5.0	3.1	0.0	9.6	0.0
Salv.	8	13	7	15	4	13	3	6	4	20	2	8	23	62	3.2	12.4	1.3	7.4	1.7	54.8
John	8	12	7	14	1	16	8	0	0	4	0	4	34	38	4.9	7.6	3.0	2.6	9.0	6.8
Tessie	0	5	4	11	6	1	8	11	3	11	2	11	6	45	1.1	9.0	0.8	4.0	0.6	16.0
Billy	3	4	4	13	5	1	9	4	1	11	0	7	24	36	3.4	7.2	1.5	2.2	2.3	4.8
Rocco	1	9	1	6	2	9	3	8	2	7	0	7	14	37	2.0	7.4	0.1	2.4	0.1	5.8
Tony A.	3	4	2	1	1	1	2	4	2	5	2	3	12	14	1.7	2.8	0.2	2.2	0.4	4.8
Elvira	1	4	4	7	2	3	1	4	2	3	1	5	11	22	1.6	4.4	0.3	0.6	0.9	0.4
John D.	1	0	0	4	1	1	2	4	3	9	6	10	5	28	0.7	5.6	2.6	0.6	6.8	0.4
Fred	0	0	1	0	2	4	3	4	1	8	2	8	5	24	0.7	4.8	1.2	0.2	1.4	0.4
Arnold	0	0	2	1	1	7	0	1	1	4	0	5	2	18	0.3	3.6	1.6	1.4	2.6	2.0
Cephas	0	0	0	1	0	1	0	1	0	3	0	1	0	7	0.0	1.4	1.9	3.6	3.6	13.0
Sergio	0	0	1	0	1	0	0	2	1	0	0	1	1	3	0.1	0.6	1.8	4.4	3.2	19.4
Henry	0	4	5	1	2	3	2	1	2	3	3	5	10	11	1.4	2.2	0.5	2.8	0.3	2.8
Nancy	0	0	0	0	0	2	0	2	2	0	0	2	2	0	0.3	0.0	1.6	5.0	2.6	25.0
Total Gain	39	83	59	87	17	89	35	58	18	87	2	78	217	339					62.7	162.0
	2.4	5.2	3.7	5.4	1.0	5.6	2.2	3.6	1.1	5.4	0.1	4.9	13.5	25						
													1.9	5						

N = 16

I Number of non-incentive weeks.....7

II Number of incentive weeks.....5

Mn I $\frac{217}{16} = 13.5$

$\frac{13.5}{7} = 1.9$

Mn II $\frac{399}{16} = 25$

$\frac{25}{5} = 5.0$

Means of

Gain I 1.9

Gain II 5.0

Diff. 3.1

and

Diff. = 19

Reliably

Diff. = $\frac{3.1}{19} = 3.4$

$$\sigma I = \sqrt{\frac{D^2}{N}} = \sqrt{\frac{62.7}{16}} = \sqrt{3.9} = 1.97$$

$$\sigma mnI \quad \frac{\sigma}{\sqrt{N}} = \frac{1.97}{\sqrt{16}} = \frac{1.97}{4} = .49 \text{ or } .5$$

$$\sigma II = \sqrt{\frac{162}{16}} = \sqrt{10.} = 3.2$$

$$\sigma mnII \quad \frac{3.2}{\sqrt{16}} = \frac{3.2}{4} = .8$$

$$\text{diff.} = \sqrt{(\sigma mnI)^2 + (\sigma mnII)^2} =$$

$$\sqrt{.5^2 + .8^2} =$$

$$\sqrt{.25 + .64} =$$

$$\sqrt{.89} = .9$$

experiment, during weeks prizes were offered, increased effort, improved attention and evidences of stimulated personalities. In most cases, this carried over into the weeks where incentives were not offered, when the children frequently asked, "What will the prizes be this week?" On being told that there would be no prizes, they agreed that learning new words was worth the effort and proceeded as before. At no time was any indication given the children that different results were expected under the differing situations.

There is ample experimental as well as commonsense evidence that the use of prizes and rewards is an effective method of stimulating activity in both children and adults. Animals, too, respond to food lures, etc. Maller and Zubin (8) show that the effect of motivation on intelligence test scores was not to increase the scores, but to so increase the effort, that the number of test tasks attempted was greatly increased. This indicates not that the motivation was ineffective, but that intelligence test scores are probably pretty good indications of native intelligence, which cannot be changed by occasional environmental influences. Griffith (7) describes several experiments which also indicate quite conclusively that "the incentive of prizes results in added effort and improved learning of 'facts'." Here is one quality that all humans whether normal or subnormal seem to have in common. They respond to the prize motive equally.

The relationship between the effect of this type of motivation and pupil's personality is of some interest. A study of the individual responses and results shows that the children can be divided into three groups. (1) Those who did equally well during incentive and non-incentive periods; (2) those who did much better during incentive periods than during non-incentive periods; (3) those who did slightly better during incentive weeks, but those whose actual gain in words learned was not of significance.

In the first group fall three boys. They were fairly stable children who had good work habits, were anxious to please the teacher and showed reading readiness in the Monroe tests and class work.

In the second group fall the most interesting children. Among these eight or nine children were some whose behavior

was like that of group one, but those who showed the greatest gains with incentives, John D. and Salvatore, were those whose achievement was lower than their mental ability and readiness warranted, who worked only under pressure and who showed definite "egocentric" tendencies. "What's in it for me?" was too often their attitude. Both were guilty of occasional petty stealing. Things meant much to them, and they responded when their reward was to be things. Salvatore learned an average of nine words more per week during incentive periods, and John D. six more. Each lost, during non-incentive periods, much of the gain made during incentive periods.

In the third group were those who responded to the incentives, but whose ability was too limited for any reading skill. Each had an I.Q. of 50 or less. The results of this group compare to the results indicated by the Maller and Zubin experiment mentioned above. Incentives can only serve to stimulate inherently possible activities, they connot produce abilities which do not exist.

The response to the different types of prizes was also of interest. Candy exerted the greatest interest, perhaps because of immediacy of use. The pennies were in nearly every case returned to the teacher in exchange for crackers. For these children, the food lure is evidently a powerful one.

The strength of the stimulation exerted by the incentives is indicated to some extent by the losses sustained during non-incentive weeks. This may also indicate that learning under artificial pressure is not retained as well as learning that is normal for the individual. However, the relation of words retained during the summer vacation period immediately following the experiment, to words learned during the experiment shows no reliable difference between the first two types of children.

In spite of the fact that the evidence points to its numerical effectiveness, philosophical considerations must be taken into account, also should prizes be used as incentives in stimulating subnormal children to maximum effort. Smith, in his "Constructive School Discipline" states the case for rewards and prizes: "All effort on the part of children as well as of older people is put forth to avoid penalty or to secure some reward, either direct or indirect, present or future. People work for

wages, play for the inherent pleasure that play affords, cultivate the fine arts to vary and enrich the emotional life . . . . . Even the struggle for distant goals, such as life beyond the grave does not overlook the idea of reward. Ordinary rewards may be either natural or artificial. Natural rewards are those which inevitably follow our thoughts, words, and deeds. Artificial rewards are those invented and sanctioned by society to make more evident or more effective the appeals to wholesome conduct. They are made necessary by the fact that the results of behavior are not always easily discoverable. This is particularly true of children who are less able than older people to see distant and indirect compensation, and hence more in need of artificial rewards to stimulate present efforts.

". . . . . Why, then, should we question the soundness and permanence of a well conceived system of rewards. If mature people do more effective work when the returns appear larger, certain and especially desirable, why should we not expect the same of children. It is futile to talk of culture, or rounded development or remote success in life as the only motives to be used in appealing to children when artificial stimuli are needed among adults to produce conspicuous or other institutional attainments. The problem therefore, is not to eliminate artificial rewards, but so to devise and administer them as to appeal to the higher motives of pupils seeking rewards. Since we do not pay pupils for study, it is necessary to build up incentives to bridge the gap between instinctive activities and deliberately directed effort for distance goals. This requires adequate motivation for all work that is expected to be superior. The simplest type of reward is expressed in appreciation. Grades, prizes and honors are the other types in general use. Among the most effective stimuli may be classed competitive enterprises for which the school letter is granted. All special awards should make as wide an appeal as possible, and should train children to struggle for the kinds of rewards that society is likely to offer them in later years, and should appeal to the highest motives to which pupils can effectively respond. Wherever group rewards can be used, they make a special appeal to cooperative and altruistic service."

Whatever of the above arguments is valid for the large mass of children and adults, is particularly valid for the subnormal child. For he is especially concrete-minded. He is nearsighted in his goals, his span of attention is limited, and he needs constant stimulation to active effort. But, it seems to me, that there are underlying fallacies in the arguments presented by Smith. Because practices are accepted in the social world, does not necessarily imply that they are the best possible ideals of practice. It is perhaps more of a psychological truth that adults need concrete rewards for good action because they were brought up that way, than that it is the only way to get good behavior. The appeals that are made by our social institutions for conformity may be indications that their intrinsic appeal is failing, that their function is a passing value, and in their last struggles for retention of power they use what appeals they can. But, the church which depends on membership contests for its followers, the college which emphasizes medals, pennants and honors as such, the manufacturing firm which offers bonuses as drives for increased production is not fulfilling constructive social functions, and in the long run will lose out. The best Christian is not the man who wins church contests, the best worker is not the one who works under pressure of rewards only, and the best student is not necessarily the one who has the most scholarship medals, etc.

Again, how can one appeal to the highest motives of pupils in offering them prizes? The less intrinsic motivation is, the lower the motive usually can be expected to be. This is not intended as refusal to accept what is practical and constructive in the above quotations, but it seems to me that the emphasis is wrongly placed. No one can deny that the desire for recognition is one of the great needs of man from infancy to senility. To build upon this desire for both individual and social welfare is the problem of the school. Appreciation is not only the simplest means of bestowing recognition, it is perhaps the most valid. Rewards do it, as does also punishment. This is the reason that punishment often does not prevent repetition of misbehavior. The child would rather get attention through punishment than not to get attention at all.

Like punishment, rewards "work" in achieving immediate ends. Perhaps, in this effectiveness of the reward lies its

greatest danger. Because this works, the parent and teacher are relieved of further effort. Because the parent can offer ice-cream for a period of quiet, he is relieved of the necessity for providing adequate outlets for the young child's energies. Because the school can offer grades, honors, pins, etc., for desirable results, it may be relieved to a large extent of devising learning situations which produce not only the immediate desirable results, but also concomitant learning of even greater value. Fortunately, however, rewards do not work as effectively as their use would lead one to expect. The law of diminishing returns may be one factor operating here, since if rewards or prizes are too familiar, they lose their appeal. So, intrinsic values have to be depended upon in the long run.

Lumley, in his "Means of Social Control" says; "The future of the practice (giving rewards or prizes) is of concern to all. There are many signs that the giving of rewards is on the increase. There is a growing belief in the efficacy of this way of *managing* people. The guardians of order believe in it; unfortunately the destroyers of order know its values. Both use it in the desperate struggles of life. It is found to be a double-edged sword.

"On the other hand a wider use of the educational method will inculcate the truth that, in the last resort, virtue, bravery, skill and such other goods, *are their own reward.* Education will gradually instill the notion that there is ultimately a hollowness and mockery in working only for rewards and living by the support of an accompanying hope."

The direction of the school is thus clearly marked. Children do not have to be trained to respond to appeals based on prizes of extrinsic value. Even animals do that. They must be trained for cooperative living in such a way that they recognize the need for their contribution to the social welfare, and feel the satisfaction of having made that contribution in the contributing itself. There are basic human needs upon which such training and education can be built. Among these are the need for experiencing activity and expression, and the need for social recognition and appreciation. If we learn to do for the sake of doing and for the direct results of the doing, whether this be the activity itself or other values gained because of the activity and dependent on it, that is how we will do. If we

learn to do for prizes, there is a grave possibility that we will not learn to do without them.

This applies with equal force to the education of subnormal and normal children. Because of the many limitations of the ability of subnormal children to see relationships, it is even more necessary for them to learn to do by doing and to learn to do in the way they will be called upon to do in life. In competition with others, they will receive few of the rewards offered by society for outstanding contributions. They will have to find intrinsic satisfaction in their activities. Since it is the problem of the public school to so educate these children that they may become stable members of the community, the school must concern itself with providing the best possible education towards this goal. It cannot be satisfied with attaining immediate classroom ends. Extrinsic and artificial means of stimulation will always have to be used, but their limitations must be recognized.

The outcome of this experiment seems to be in direct conflict with the writer's philosophy concerning its aim. But the results of the experiment did show a place where this type of activity could be used to good advantage. Where a child or group of children do not seem to work up to capacity, the application of an incentive may show where some of the causes lie. As with the second group described above, the experiment showed that these children could learn to read under certain conditions. The job of the school here is to find optimal conditions, taking into consideration all phases of the learning. The incentive, therefore, can be used as a diagnostic factor. If the incentive works, it should be used only until a better means can be found.

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A CHRISTMAS LETTER

One of the hundreds of many lovely things that happened at Christmas time was a letter from Hans Kellerhals, of Witzwil, Switzerland. Like all of his letters it was full of good cheer and happiness, and he reminds us that it has been thirteen years since he was here to spend some months with us. Everything is going well in their Switzerland institution; we all know this would be so with a Kellerhals at its head, and we are sending back to them all good wishes from their American friends.

The Christmas play was in full swing. Mrs. Nash wanted Johnny a few minutes overtime at the school. "I suppose you are very busy at the poultry yard dressing turkeys, arn't you, Johnny?" she smiled as she addressed the little boy. He looked up at her rather bewhildered, and in all seriousness, "No mam, we're undressing 'em."

Aids to Teaching

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Two perennial difficulties face teaching, as they do all other professions, namely, knowing what to do and how to do it. Most of us have more knowledge than we make use of, and the tendency among teachers, as among other workers, is to delay the practical capitalization of new-found knowledge. Although Americans are considered more utilitarian than they are learned, it is safe to say that our practice still lags seriously behind our wisdom. Probably the greatest waste in this scientific age is the general failure to exploit for social purposes the large amount of knowledge that is so rapidly accumulating in the social sciences.

The public schools of today are making a courageous attempt to make immediate use of the tremendous advances in new educational techniques. Public and private institutions for mental defectives and special classes for the mentally retarded in the public schools have exercised a profound influence in promoting new concepts and new methods in primary education. The average citizen today is hardly aware of the fundamental revolution that has been taking place in the educational world during the past two decades. New methods developed throughout our educational systems have made such rapid advances that it behooves those of us who are concerned with the education of the mentally subnormal to re-examine our educational theories and practices.

The teacher of mentally deficient and mentally retarded children will, first of all, do well to examine the advances being made in other fields of education for the mentally, physically and socially handicapped children of today. Schools and classes for the blind, the deaf, the crippled, the verbally handicapped, the socially underprivileged, the delinquent, and so on, have here and there developed astonishing progress. Along with these programs of education have also been developed new teaching materials and devices of marked value.

One contribution definitely promoted by the education of the mentally subnormal has been the increasing emphasis on manual education as the natural educational program for children under 10 years of age, or with mental ages under 10 years. Educational psychologists have emphasized for a generation that academic education should not be urged upon children until 9 or 10 years, that is, until the third or fourth school grade, or mental age 9 or 10. The obvious psychological possibilities and needs of this early period of systematic instruction are in the direction of creative motor activities. Even the average normal child is not psychologically ready for the symbolic education represented traditionally by the three R's until about 10 years of age, and we know that the subnormal child is especially handicapped in abstract learning. One of the principal sins of academic education has been the tendency toward premature instruction as a result of which the child develops a distaste for reading, an emotional set toward arithmetic, and an antagonism toward geography by having these subjects taught long before he is ready to learn them or before he can appreciate their significance.

Two important publications typify current trends toward progress.* The institutional teacher and the special class teacher, no less than the teacher in the grades, owes it to herself as well as to her pupils to become thoroughly familiar with these or similar contributions. Those responsible for the administration of education in institutions, special classes and the primary grades should also be greatly benefitted by such contributions.

The New York State report, for example, provides a summary of current trends based on an analysis of 450 reports from teachers and principals, and contains a wealth of illustrative material of immediate practical value. It is neither feasible nor necessary here to abstract or review the contents of this important publication; the major points are summarized in the introduction to the report in seven major trends, and the content of the report provides detailed information with many illustrations as to how these trends are finding modern expression.

* NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF ELEMENTARY SCHOOL PRINCIPALS. Aids to Teaching in the Elementary School (Thirteenth Yearbook). **National Elementary Principal,** Vol. XIII, No. 5, June, 1934. Reviewed in **Training School Bulletin,** Vol. XXXI, No. 10, p. 203.
CARDINAL OBJECTIVES IN ELEMENTARY EDUCATION. Trends in Unit Teaching. (Fourth report) **University of the State of New York Bulletin,** No. 1043, May 1, 1934. See also previous reports in this series.

Similarly, the report of the Elementary School Principals of the National Education Association is of special significance to every teacher in institutions and special classes for abnormals as well as teachers of young normal children. This monograph calls attention to many useful devices and materials of the utmost value for primary instruction which are available at little or no cost.

Incidentally, there is danger that the institutional teacher, habituated as she is likely to be to having all her major expenditures provided by her institution, may overlook her responsibility for professional self-improvement. The alert teacher may properly be expected to subscribe to current professional magazines, maintain membership in professional societies, make reasonably frequent purchases of new books, purchase sample materials of her own, and so on, not only to promote her professional growth and service, but also to avoid the deadly monotony in her work that is otherwise inevitable. The following sources represent some of the materials that should be familiar to such teachers, but is by no means an exhaustive or even a "best" list. The progressive teacher, continually on the lookout for materials of this sort, will not only make her work more effective, but also more joyous.

There are several useful compendiums, such as Compton's Pictured Encyclopedia, The World Book, The Book of Knowledge, My Book House, and others which provide useful general information as well as good sources of children's literature. Compton's Pictured Encyclopedia, for example, contains a wealth of authoritative information profusely illustrated with photographs and schematic drawings. While the reading difficulty of most of this material is beyond the ability of all but the highest grades of mentally deficient children, the teacher will find this material invaluable in her own classroom preparation.

Several publishing houses specialize in teaching materials that make teaching easier and learning more enthusiastic. Typical of these is the Plymouth Press in Chicago which offers many practical and useful aids to primary teaching. These publishing houses are pleased to enroll teachers on their mailing lists and keep them advised of new developments.

Modern textbooks have shown remarkable strides. Many of the newer texts are published in Thorndike's simplified vocabulary, thus eliminating the vocabulary difficulty of instruc-

tion by simplifying the language content. The standard book houses are pleased to circularize teachers who desire to learn these new devices. For example, the Hunter and Whitman Science Series is a fascinating set of books on general and social science at about the seventh and eighth grade level. If the pupils do not have sufficient reading skill to read these books for themselves, at least the illustrations are helpful and the material is readily available to the teacher who would otherwise have to prepare such material from more difficult sources.

The wealth of current magazines published in this country offers almost unlimited resources. Popular Science is typical of those which appeal to children interested in manual activities and the more immediate uses of science. The Geographic Magazine is enjoyed by mentally retarded children and so are those other magazines covering the fields of travel and natural science.

One of the important recent devices is The American World. This is a newspaper published by the Language Research Institute, New York University. The material is judiciously selected and is presented within the limits of a 900-word vocabulary. In addition to the news items there are numerous other newspaper features of interest to children. This newspaper practically solves the problem of providing current events which retarded children can read for themselves if they have about third grade reading ability.

One definite need in institutions and special classes for subnormal children is that of providing a suitable system of intelligence and achievement tests by means of which children can be adequately classified for different levels of instruction within the major classification of mental deficiency itself. Achievement tests and modern record systems are available from the standard publishing houses. The Public School Publishing Company and the World Book Company are representative houses which provide standard materials of this sort. The use of these devices will save much time in teaching children what they may already know, or continuing to teach them what they cannot, or at least do not (and perhaps should not) learn.

The education of the mentally subnormal in the last two decades has had a powerful influence on education in general. If we continue to progress as we have in the past, special education will unquestionably justify itself as an educational laboratory within our national school system.

"It Happened In Eurolania"*

An Operetta in Two Acts

CAST OF CHARACTERS

King Rudolph, king of Eurolania	Wilbur B.
Queen Constance, his wife	Marietta F.
Rosalinda, his elder daughter	Betty B.
Marie, his younger daughter	Mae G.
Prince Karl, his son	Herbert H.
Dana Dawes, a camera man from Hollywood	J. Watts
Percival McPipp, a moving picture director	Edward S.
Marmaduke Ruggles, his assistant	William L.
Galooski, prime minister of Eurolania	Joseph G.
The Lord Chamberlain	Francis B.
Count Sergius von Popova, a conspirator	Joseph P.
Demetrius Doodledorf, his right-hand man	Frank H.
Trombonius Tootletop, his left-hand man	George D.

Courtiers, Guards, Sailors, The Court Ladies, Merrymakers,
The Dancers, The Wedding of Jack and Jill.
Eighty children in the Cast.

BETWEEN THE ACTS

Recitation—"Expecting Santa"	Joe P.
Recitation—"Hurrah for Christmas"	Horace A.
Instrumental Quartet—"Christmas Hymns"	Charlie, George, Joe, Alfred
Recitation—"Just Before Christmas"	Richard G.

* The Christmas Play—December, 1935.

Christmas Notes

CHRISTMAS EVE

For many a Christmas there has been no snow at Vineland, so that Santa has been obliged to come by auto or airplane. This year however, we were blessed in having a nice fall of snow, just right for using a reindeer and sleigh—that wonderful sleigh with real bells that jingle and ring out the glad tidings that Santa is about to appear.

After the children had anxiously awaited for Santa to come in the customary manner, the Director went to the telephone installed at the side of the stage, and called Mrs. Santa. She said that the last word she had from Santa was somewhere between our Colony at Menantico and the State Colony at Woodbine. When Professor Johnstone finally talked with him and repeated to the children what he said over the telephone: that he was coming with his sleigh and reindeer, there was an ovation that could be heard over the telephone lines clear back to Santa. Santa said so himself, so it must be true.

Christmas this year has been particularly fine because it has renewed our faith in these days when faith and trust in each other are so badly needed. The swelling chorus of the children of The Training School proclaims to all of us that truth which will carry us gloriously through another year.

A BOY AND A WAGON

I have just had a ride in a new red wagon pulled by a little eight-year-old boy. I do not count in the story, but the wagon and the boy do.

Clide is like so many little boys, coming from near the railroad tracks of one of our larger cities. For eight years he had been struggling against very unfair odds and repeated failure and frustration were taking their toll. It was school failure that was given as the reason for his coming to us. He arrived a few days before the writing of the Christmas letters. He hesitated to "write" his, because experience had taught him to look with suspicion upon anything that promised happiness, and then, too, he had never written a Christmas letter before. His letter was a rather hopeless little message: "Dear Santa, This is the first letter I have ever written you, —— I am a new boy, —— I am trying to be a good boy, —— I would like, —— a wagon. Merry Christmas, Clide." His letter he saw placed with those of the others of his group and prepared for the trip to the old fellow at the North Pole, but he shared little of the faith and enthusiasm shown by his fellows. Christmas to him was standing in a slushy street pressing his already puggy nose against a show window of a department store displaying toys, but he had never gotten beyond the glass and his imagination, dulled to begin with because of mental defect, had been dulled even more by disappointment.

The days passed quickly enough because there were so many things to do in the new school. The pre-Christmas spirit was everywhere and Clide couldn't escape its effect. Christmas eve arrived with all its thrills and pleasures at the Hall. Christmas night found Clide believing that this Christmas was to be different.

This morning he was found in the front ranks of the rush for the Christmas tree and the mass of packages beneath it, but every wagon he touched (and there were several), he was told belonged to somebody else,

and none of the packages with their gay wrappings and seals bore his name. Once more history was repeating itself, one more disappointment, but this one was especially bitter coming at the time when he was just beginning to believe that such hateful things were something of the past. Cry? No, there were no tears left. He had run out of those some time during those years prior to his coming to the new school. He simply stood and watched the others as had been his custom all his life.

In the cottage next door, the cottage that Clide had been in when he "wrote" his letter to Santa, stood a grand new red wagon filled with packages that went unclaimed by members of that group. They were distinctly labeled "Clide." Santa had not learned of Clide's new address. When the discovery was made, they were hurried over to the other cottage, and so—

I have just had a ride in a new red wagon pulled by a little eight-year-old boy. *I* do not count in the story, but the wagon and the boy do. The wagon has restored that something that will enable the boy, despite his handicaps, to find that elusive state—happiness, and of course, all else follows.

J. T. McIntire

THE JOY OF ANTICIPATION

Santa had been here on Christmas Eve and told the boys that, since he had so much to do the next day, Mr. Merithew, Menantico's Mayor, would distribute the gifts. And as Mr. Merithew moved about, a pair of dark brown eyes were centered on him. The boy observed with zeal the distribution of gifts; his facial muscles were playing zig-zag with one another. Finally his name was called out. Jumping up with impish gestures, he seized the package—not waiting for an assistant to cut the strings —, and hurried to a corner where with trembling fingers he undid the wrappings. The sweater, slippers, gloves, and candy were ignored in his frantic attempts to get at a small box in the bottom of the package. When this object was unearthed, the tremor of happiness passed from a minor to a major psychic upheaval. His face radiated expected joy . . . . . a rare, strange, and beautiful configuration. The emotional cataclycism was consummated when he screamed, "I got it, my watch!" and raced around the room.

The intensity of emotion displayed by this boy, and other children at the Training School at Christmas time, can not be understood unless one is familiar with some of the antecedents. There are a number of annual events at The Training School, but the one to which all children look forward to with greatest delight, in my opinion, is Christmas. Preparations for the holiday season were begun soon after Thanksgiving and the children begun talking about Christmas. For weeks one heard tell of last year's gifts, the turkey dinners, the Carols on Christmas morning, the tree, and the decorations. As one of them put it, two weeks ago when I was preparing for a trip to New Haven, "You want to be sure to come back for Christmas, Doc. We have a lot of fun."

In this anticipation lies the secret of Christmas joy at Vineland. Past pleasures lead to anticipations of future enjoyments and the anticipations themselves become goals of happiness.

Anthony J. Mitrano